

Practice 6-3**Dividing Fractions****Write the reciprocal of each number.**

1. $\frac{7}{10}$ _____ 2. 4 _____ 3. $\frac{1}{3}$ _____

4. Draw a diagram to show how many
- $\frac{3}{4}$
- ft pieces of string can be cut from a piece of string
- $4\frac{1}{2}$
- ft long.

Find each quotient.

5. $3\frac{3}{10} \div 1\frac{4}{5}$

6. $\frac{3}{8} \div 3$

7. $2\frac{1}{3} \div \frac{2}{7}$

8. $\frac{1}{4} \div \frac{1}{4}$

9. $\frac{7}{8} \div \frac{2}{7}$

10. $\frac{1}{4} \div \frac{1}{8}$

11. $1\frac{1}{2} \div 3\frac{3}{5}$

12. $\frac{8}{9} \div \frac{1}{2}$

13. $3 \div \frac{3}{8}$

Solve.

14. How many
- $\frac{3}{4}$
- cup servings are there in a 6-cup package of rice?

15. George cut 5 oranges into quarters. How many pieces of orange did he have?

16. Maureen, Frank, Tashia, Zane, Eric, and Wesley are addressing envelopes for volunteer work at a local charity. They were given
- $\frac{3}{4}$
- of an entire mailing to address to be evenly divided among six of them. What fraction of the entire mailing does each person address?

Enrichment 6-3

Dividing Fractions

Patterns in Numbers

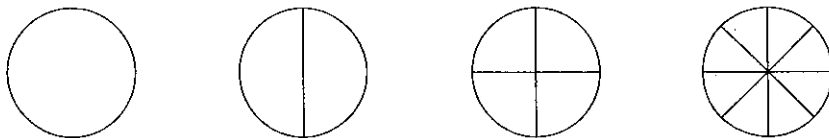
You have found rules for number sequences. For example, you know that the rule for the sequence 3, 9, 27, 81 is *Multiply by 3*.

You can also find rules for sequences that contain fractions. Some rules also contain fractions. Write the next three terms in each sequence below. Then write the rule.

1. 81, 27, 9, 3 _____, _____, _____, ... Rule: _____
2. 250, 50, 10, 2 _____, _____, _____, ... Rule: _____
3. 1, 8, 64, 512, _____, _____, _____, ... Rule: _____
4. 1000, 100, 10, 1, _____, _____, _____, ... Rule: _____
5. $\frac{1}{8}, \frac{1}{2}, 2, 8, ______, ______, ______, \dots$ Rule: _____
6. $\frac{3}{2}, 1, \frac{2}{3}, \frac{4}{9}, ______, ______, ______, \dots$ Rule: _____
7. How could you rewrite the rule *Divide by 2* using a fraction in the rule? Think: $4 \div 2 = 2, 4 \times \frac{1}{2} = 2$ _____
8. Rewrite each rule for Exercises 1–6 above.

a. 81, 27, 9, ... _____	b. 250, 50, 10, ... _____
c. 1, 8, 64, ... _____	d. 1000, 100, 10, ... _____
e. $\frac{1}{8}, \frac{1}{2}, 2, \dots$ _____	f. $\frac{3}{2}, 1, \frac{2}{3}, \dots$ _____

9. Draw the next figure in the pattern. Then write two rules for the pattern.



10. Draw the next figure in the pattern. Then write two rules for the pattern.

